- iii. The proposal does not account for the loss of ecological services arising from the interrelationship of the headwater streams and the surrounding terrestrial ecology.
- iv. The proposal fails to account for the ecological uncertainty associated with the described stream corridor enhancement. Mitigation goals and performance targets (standards) remain unknown. Proposals that emphasize aquatic resource preservation do not document the amount of risk attributed to their potential development.

## 4. Other resource impacts

- a. As of August when EPA reviewed the PAFEIS, the project was still predicted to exceed the PSD Class II increment value for PM2.5 for the 24-hour averaging time under all action alternatives.
- b. The project would result in exceedances of threshold values for visibility impacts and nitrogen deposition in Class I areas (Saguaro Park East in particular).
- c. It is our understanding that the Tohono O'odham Nation continues to fundamentally object to the project, feels that the impacts that would result are unacceptable, and does not believe that their recommendations for further tribal/cultural resource mitigation were given appropriate consideration.

## Path forward

- 1. The FEIS should more accurately describe the nature and range of potential impacts of the project.
  - a. As previously stated, due to the limited amount of real world data and the large uncertainty inherent in using the groundwater modeling for determining surface water impacts, a weight-of-evidence based risk assessment would be the most appropriate method for reaching qualitative conclusions regarding the project's overall risk to these resources. See attached risk assessment proposal.
  - b. Alternatively, if necessary due to timing pressures, Alternatively, we suggest using an extrapolation of the most conservative estimate of impacts from groundwater modeling to develop an appropriate mitigation plan, with EPA would be willing to work with USFS on the inclusion of some specific language into the EIS that would help decision makers and the public to understand the project impacts and associated uncertainties more clearly. This includes:
    - i. Clarification that the impact scenarios for all distant waters outside the 5 foot drawdown contour are provided for illustrative purposes only, because the models lack appropriate resolution for detailed quantitative impact assessment
    - ii. Acknowledgement that mitigation proposed to date and discussed in the EIS for offsetting impacts to WUS may not be adequate for the project to qualify for a CWA 404 permit post-NEPA.
- 2. The FEIS should describe the nature and scale of mitigation that would be required for project approval. This should include:
  - a. Mitigation that is commensurate with project impacts, both direct and indirect. As indicated above, this would likely mean watershed-scale compensation.
  - b. The acquisition of sufficient wet surface water and/or groundwater to fully replace and offset the direct and indirect impacts associated with the hydrologic effects of groundwater drawdown from the mine pit. "Mitigation water" would have to be of sufficient quantity and quality, and made available in a manner that would offset predicted groundwater drawdown and associated surface water impacts from the proposed mine pit.
  - c. The development of funding for management of aquatic resource mitigation and conservation mitigation. Linkages between conservation mitigation and aquatic resource mitigation would need to be explained.